

Project Information Sheet

Project: 801351 Sunnyvale Contribution to SMaRT Station Equipment Rep. Fund

Category:	Special	Type:	Solid Waste	Department:	Public Works
Origination Year:	1995-96	Fund:	485 Solid Waste Management Fund	Project Manager:	Richard Gurney
Planned Completion Year :	Ongoing	Sub-Fund:	200 Solid Waste Capital Subfund	Project Coordinator:	Mark Bowers
Funding Sources: Solid Waste Revenues					

Project Description/Scope/Purpose

The Sunnyvale Materials Recovery and Transfer (SMaRT) Station Capital Replacement Fund equipment replacement reserve is funded by Sunnyvale, Palo Alto, and Mountain View, at 55.25%, 21.27% and 23.45% of the total costs, respectively. This project reflects Sunnyvale's 55.25% share of contributions to the replacement fund. A related project, 811250, SMaRT Station Equipment Replacement, shows actual expenditures as opposed to Sunnyvale's annual dollar contribution. The replacement schedule, costs, and contribution amounts are updated annually to reflect anticipated expenses, based on the City's experience since the SMaRT Station opened in 1993.

Costs have increased due to major equipment replacement needs. Equipment is showing excessive wear and fatigue, resulting in more frequent facility downtime for maintenance and replacement of worn components. In some cases, proprietary equipment items require expensive upgrades; or repair parts are not available. Efficiencies provided by updated equipment will allow a staff reduction of sorters. This will save an estimated \$400,000 - \$600,000 per year in SMaRT Station operating costs in FY 2008/2009 (or when the equipment installation is complete, whichever is later).

No City contributions (i.e. project expenditures) are shown after FY 2016/2017. The fund balance will be large enough to handle FY 2018/2019 expenditures.

Project Evaluation & Analysis

The timing and approach to replacement of various equipment items is re-evaluated yearly with the goal of pursuing the most cost-effective path (repair, replacement, refurbishing, or removal) for each project component. The net present value analysis shows a substantial long-term financial benefit if the MRF equipment is replaced and not retained. This reflects lower SMaRT Station operating (labor) cost because of the more up-to-date technology of the equipment, lower landfill disposal costs because more recyclables will be diverted from disposal and higher revenues from the sale of those recyclables.

The equipment replacement project is linked to the 2006 Request for Proposals (RFP) for operation of the SMaRT Station. The proposers have been asked to submit their pricing on the assumption that the MRF equipment replacement project is complete and that the SMaRT Station is properly equipped in all other respects.

Fiscal Impact

Contributions to the replacement fund are recovered as part of the City's Refuse Collection fees. No City contributions (i.e. project expenditures) are shown after FY 2016/2017. The fund balance will be large enough to handle all remaining expenditures through the end of the SMaRT Station Memorandum of Understanding.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	2,933,814	0	2,325,734	0
2006-07	718,640	0	0	0
2007-08	248,760	0	0	0
2008-09	248,760	0	0	0
2009-10	248,760	0	0	0
2010-11	248,760	0	0	0
2011-12	248,760	0	0	0
2012-13	248,760	0	0	0
2013-14	248,760	0	0	0
2014-15	248,760	0	0	0
2015-16	248,760	0	0	0
2016-17	248,760	0	0	0
2017-18	248,760	0	0	0
2018-19	248,760	0	0	0
2019-20	248,760	0	0	0
2020-21	248,760	0	0	0
2021-22	248,760	0	0	0
2022-23	248,760	0	0	0
2023-24	248,760	0	0	0
2024-25	248,760	0	0	0
2025-26	248,760	0	0	0
2026-27	248,760	0	0	0
20 Year Total	4,975,200	0	0	0
Grand Total	8,627,654	0	2,325,734	0

Project Information Sheet

Project: 811250 SMaRT Station Equipment Replacement

Category:	Special	Type:	Solid Waste	Department:	Public Works
Origination Year:	1995-96	Fund:	490 SMaRT Station	Project Manager:	Richard Gurney
Planned Completion Year :	Ongoing	Sub-Fund:	200 SMaRT Station Equipment Replaceme	Project Coordinator:	Mark Bowers
Funding Sources: Contributions from Sunnyvale, Mountain View, and Palo Alto					

Project Description/Scope/Purpose

This project replaces and maintains City-owned equipment and facilities at the Sunnyvale Materials Recovery and Transfer (SMaRT) Station. This facility is operated for the cities of Sunnyvale, Mountain View, and Palo Alto under a memorandum of understanding that expires in 2021. Periodic equipment replacement is necessary to ensure the cost-effective operation of the SMaRT Station throughout its useful life of 30 years.

This project funds replacement of some three dozen components of the SMaRT Equipment and facilities, each with its own useful life. Funds for FY 2006/2007 are budgeted to replace the materials recovery facility (MRF) equipment, which was installed in FY 1993/1994 and will have been in service for 13 years at the time of its replacement. The new MRF equipment is projected to have a useful life of 16-17 years. Other elements of equipment replacement work scheduled for FY 2007/2008 include tipping floor and curbside repairs, asphalt paving/stripping and exterior painting.

Project Evaluation & Analysis

The timing and approach to replacement of various equipment items is re-evaluated yearly with the goal of pursuing the most cost-effective path (repair, replacement, refurbishing, or removal) for each project component. The net present value analysis shows a substantial long-term financial benefit if the MRF equipment is replaced and not retained. This reflects lower SMaRT Station operating (labor) cost because of the more up-to-date technology of the equipment, lower landfill disposal costs because more recyclables will be diverted from disposal and higher revenues from the sale of those recyclables.

The equipment replacement project was linked to the 2006 Request for Proposals (RFP) for operation of the SMaRT Station. The proposers submitted their pricing on the assumption that the MRF equipment replacement project is complete and that the SMaRT Station is properly equipped in all other respects.

Fiscal Impact

This project is funded by payments to the replacement reserve made by Sunnyvale, Palo Alto and Mountain View, which pay 55.28%, 21.27% and 23.45% of the total costs, respectively. A separate capital project, #801350, is funded by the Solid Waste Fund and represents Sunnyvale's contribution to this project. The replacement schedule, costs and interest earnings are updated annually to reflect anticipated expenses, based on the City's experience since the facility opened in 1993. Costs have increased due to major equipment replacement needs. The MRF equipment is showing excessive wear and fatigue resulting in more frequent facility downtime for maintenance and replacement of worn components. Efficiencies provided by updated equipment were estimated to allow a staff reduction of sorters. This will save \$400,000 to \$600,000 per year in SMaRT Station operating costs beginning in FY 2008/2009 (or when the equipment installation is complete, whichever is later).

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	1,303,286	37,398	1,065,554	0
2006-07	8,860,609	0	0	0
2007-08	6,283,366	0	0	-827,072
2008-09	379,366	791,550	0	-734,457
2009-10	1,040,466	809,207	0	-782,836
2010-11	89,851	827,272	0	-834,275
2011-12	993,075	846,042	0	-891,226
2012-13	1,600,559	851,799	0	-1,620,487
2013-14	122,423	869,100	0	-1,690,198
2014-15	214,774	886,569	0	-1,761,403
2015-16	49,599	904,389	0	-1,835,898
2016-17	327,496	922,567	0	-1,922,550
2017-18	682,953	941,111	0	-2,020,990
2018-19	213,878	960,027	0	-2,125,008
2019-20	589,368	979,324	0	-2,234,924
2020-21	138,203	999,008	0	-2,350,974
2021-22	30,275,593	1,019,088	0	-2,168,438
2022-23	789,551	0	0	0
2023-24	1,930,893	0	0	0
2024-25	698,146	0	0	0
2025-26	940,974	0	0	0
2026-27	1,309,162	0	0	0
20 Year Total	48,669,696	12,607,053	0	-23,800,736
Grand Total	58,833,591	12,644,451	1,065,554	-23,800,736

Project Information Sheet

Project: 821170 SMaRT Station Operations Contract RFP

Category:	Special	Type:	Solid Waste	Department:	Public Works
Origination Year:	1999-00	Fund:	490 SMaRT Station	Project Manager:	Mark Bowers
Planned Completion Year :	Ongoing	Sub-Fund:	100 SMaRT Station Operating	Project Coordinator:	Gail Bentley
Funding Sources: Sunnyvale Contribution (Fund 485), Mountain View Contribution, Palo Alto Contribution					

Project Description/Scope/Purpose

This project funds development, issuance, and evaluation of a Request for Proposals (RFP) to operate the City's Sunnyvale Materials Recovery and Transfer (SMaRT) Station. Selection of an operator for the contract beginning in January 2008 will be made in FY 2006/2007. The contract term is for seven years of operation at a total estimated cost in excess of \$70 million. The proposed budget assumes that there will be another RFP process beginning every seven years in advance of the expiration of the then existing contract. The SMaRT Station Operations Fund will be reimbursed for the full cost of the project by Sunnyvale, Palo Alto, and Mountain View, based on their proportions of solid waste delivered to the SMaRT Station in the year the expenditures occur. A separate project, 821180, reflects Sunnyvale's contribution to this fund.

Project Evaluation & Analysis

In lieu of a competitive process, an extension could be negotiated with the incumbent contractor. However, analysis of previous extension proposals has shown that pricing and/or terms have not been favorable to the City when compared to funding this project and conducting a competitive procurement. Benefits of competitive procurement include an unfettered opportunity to modify the contract terms in response to changes in law, technology, and market conditions. Business and operational project impacts include refuse collection, transfer and disposal, recyclable materials collection, processing and marketing, and the equivalent services that the City provides to Mountain View and Palo Alto per the SMaRT MOU. If this project is not funded, the City will not be able to pay for a competitive procurement for the operations contract. If delayed, the contract for operations will need to be renegotiated to extend its end date so that the City can continue to operate the SMaRT Station.

Fiscal Impact

The SMaRT Station Operations Fund will be reimbursed for the full cost of the project by Sunnyvale, Palo Alto and Mountain View, based on their proportions of solid waste delivered to the SMaRT Station in the year the expenditures occur. A separate project, 821181, funded by the Solid Waste Fund (Fund 485) funds Sunnyvale's contribution to the cost of this project. The proposed budget is based on the expenditure history of previous RFPs. There is no operating cost resulting from the RFP itself.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	154,348	261,836	0	0
2006-07	107,488	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	168,859	156,000	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	199,727	156,000	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	245,640	156,000	0	0
20 Year Total	614,226	468,000	0	0
Grand Total	876,062	729,836	0	0

Project Information Sheet

Project: 821181 Contribution to SMaRT Station Operations Contract RFP

Category:	Special	Type:	Solid Waste	Department:	Public Works
Origination Year:	1999-00	Fund:	485 Solid Waste Management Fund	Project Manager:	Mark Bowers
Planned Completion Year :	Ongoing	Sub-Fund:	200 Solid Waste Capital Subfund	Project Coordinator:	Gail Bentley
Funding Sources: Solid Waste Revenues					

Project Description/Scope/Purpose

A separate project (821170) Sunnyvale Materials Recovery and Transfer (SMaRT) Station Operations Contract Request for Proposals (RFP), funds development, issuance, and evaluation of a RFP to operate the City's SMaRT Station. This project (821181) captures Sunnyvale's contribution to the SMaRT Station Operations Fund for its share of the RFP project expenses. The current contractor will operate the facility through December 31, 2007, when the contract is scheduled to expire. The proposed budget in this project assumes that there will be another RFP process, beginning in FY 2012/2013 and every 7 years thereafter. The SMaRT Station Operations Fund, 490/100, will be reimbursed for the full cost of this project by Sunnyvale, Palo Alto, and Mountain View, based on their proportions of solid waste delivered to the SMaRT Station in the year the expenditures occur. Project 821170 reflects the total contribution by the three cities to this fund.

Project Evaluation & Analysis

In lieu of a competitive process, an extension could be negotiated with the incumbent contractor. However, analysis of previous extension proposals has shown that pricing and/or terms have not been favorable to the City when compared to funding this project and conducting a competitive procurement. Benefits of competitive procurement include an unfettered opportunity to modify the contract terms in response to changes in law, technology, and market conditions. Business and operational project impacts include refuse collection, transfer and disposal, recyclable materials collection, processing and marketing, and the equivalent services that the City provides to Mountain View and Palo Alto per the SMaRT MOU. If this project is not funded, the City will not be able to pay for a competitive procurement for the operations contract. If delayed, the contract for operations will need to be renegotiated to extend its end date so that the City can continue to operate the SMaRT Station.

Fiscal Impact

This project represents Sunnyvale's share of Project 821170, based on the three cities' proportionate shares of garbage tons delivered to the SMaRT Station. This project is funded by Sunnyvale refuse collection revenues. There are no ongoing operations costs associated with the project. The RFP process and the two related projects are anticipated to recur every seven years.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	125,463	0	50,187	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	83,008	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	98,183	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	120,752	0	0	0
20 Year Total	301,943	0	0	0
Grand Total	427,406	0	50,187	0

Project Information Sheet

Project: 822331 Trim Landfill Screening Trees on Caribbean Drive

Category:	Special	Type:	Solid Waste	Department:	Public Works
Origination Year:	2001-02	Fund:	485 Solid Waste Management Fund	Project Manager:	Mark Bowers
Planned Completion Year :	Ongoing	Sub-Fund:	200 Solid Waste Capital Subfund	Project Coordinator:	Gail Bentley
Funding Sources: Solid Waste Revenues					

Project Description/Scope/Purpose

The south side of the Sunnyvale Landfill is screened by a row of eucalyptus trees that runs for over one mile along the north side of Caribbean Drive and on the northerly block of Borregas Ave. These trees were pruned in 2002 and again in August 2006. These species of trees should be pruned at three-year intervals throughout the 20-year financial plan.

If left unpruned the trees create liability for the City. Eucalyptus trees shed limbs if not pruned, which would pose a hazard to motorists, bicyclists, and pedestrians traveling underneath the trees on Caribbean Drive and the landfill perimeter roads and employees working in those areas. If trees near the Borregas/Caribbean intersection are overgrown, excess vegetation blocks the view of truck drivers, motorists, pedestrians and bicyclists entering Caribbean from southbound Borregas. There is no legal requirement for this project. Work is generally done by an outside contractor.

Project Evaluation & Analysis

Alternatives are to remove the trees or replace them with another species. However, removing the trees would conflict with the Solid Waste Sub-element, which states (Action Statement 3.2H.3), "Maintain a vegetative screen along Caribbean Drive and Borregas Ave. to enhance the aesthetics of the landfill, as viewed from the adjacent industrial area."

Replacement of the trees would detract from the goal of maintaining a screen. Eucalyptus were used because they are inexpensive, grow tall quickly, are evergreen and tolerant of the soils. Pruning cycle was recommended by the Urban Landscape Supervisor, and is good for eucalyptus because they develop structural weakness if pruning is less frequent. Structural weakness increases the chances of claims, injuries or accidents from falling limbs. If pruning is less frequent, the cost per pruning will go up because the contractor will take out more, larger limbs. The most cost-effective way to reduce City liability is to prune every 3 years.

Fiscal Impact

This project is funded by the Solid Waste Fund (Fund 485) and is ongoing, with a pruning scheduled every three years. The budget amount is based on the low bid received when this scope of work was put out to bid in the summer of 2006. Because this is a large, periodic item of work, the most cost-effective method is to contract the work to an outside tree pruning vendor.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	34,419	0	34,419	0
2006-07	35,000	0	0	0
2007-08	0	0	0	0
2008-09	50,000	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	53,060	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	56,308	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	60,340	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	65,936	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	72,050	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	78,731	0	0	0
20 Year Total	436,425	0	0	0
Grand Total	505,844	0	34,419	0

Project Information Sheet

Project: 824251 Landfill Gas System Response to New Federal Regulations

Category:	Special	Type:	Solid Waste	Department:	Public Works
Origination Year:	2003-04	Fund:	485 Solid Waste Management Fund	Project Manager:	Mark Bowers
Planned Completion Year :	2007-08	Sub-Fund:	200 Solid Waste Capital Subfund	Project Coordinator:	Gail Bentley
Funding Sources: Solid Waste Revenues					

Project Description/Scope/Purpose

The Sunnyvale Landfill was required by Bay Area Air Quality Management District (BAAQMD) to apply for a Title V (federal Major Facility Review) permit in addition to complying with BAAQMD Regulation 8, Rule 34 (8-34). The application was submitted in 2003. BAAQMD has deemed it complete, but has not issued the Title V permit.

Significant consultant and equipment costs will be involved in negotiating the terms of the Title V permit and in complying with the new requirements of both 8-34 and Title V. Additional instrumentation is required to monitor and record gas utilization aspects of the Power Generation Facility and Landfill Gas Flare operations. Test and repair equipment and supplies will need to be purchased to bring landfill gas field operations up to the more rigorous standards of the Title V regulations. Consultant work associated with the initial permit will include inspections to identify existing emission sources and to obtain other pertinent information, completion of emission estimates for the sources, development of a final list of applicable regulatory requirements, evaluation of the facility's compliance status with each applicable air quality regulatory requirement and development of a compliance plan. An emissions monitoring program complying with the Compliance Assurance Monitoring (CAM) requirements of Title V will be prepared and associated monitoring reports and plans will be developed, as necessary, to comply with CAM requirements. Additional effort related to Reportable Compliance Activities reporting is anticipated during the initial stages of Title V implementation.

The Title V Permit will also require an increase in flare emissions monitoring frequency (from every three years to annual), and an increase in the scope of monitoring. This work will be seen as operating cost in Activity 323310.

Project Evaluation & Analysis

The City is required by Federal law to apply for the Title V permit and is legally obligated to comply with associated regional and federal regulations. This project is intended to address the initial costs of transitioning to the Title V permit and its more strict regulation scheme. Ongoing costs of compliance will be incorporated into the budgets for Activities 323310 (Operate, Maintain Landfill Gas Collection and Condensate System) and 324110 (Administer SMaRT Station). Failure to comply with the new permit would expose the City to significant financial penalties and would damage the City's public image.

Fiscal Impact

The project is funded by the Solid Waste Fund (Fund 485). The project budget was set at \$50,000 based on experience in complying with similar regulatory changes and on conversations with consultants who have worked on similar projects. Ongoing costs are estimated at \$29,000 per year and have been incorporated into the operating budgets for Activities 323310 and 324110.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	503	0	498	0
2006-07	49,497	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	0	0	0	0
Grand Total	50,000	0	498	0

Project Information Sheet

Project: 824261 Solid Waste Cost of Service Study

Category:	Special	Type:	Solid Waste	Department:	Public Works
Origination Year:	2005-06	Fund:	485 Solid Waste Management Fund	Project Manager:	Mark Bowers
Planned Completion Year :	Ongoing	Sub-Fund:	200 Solid Waste Capital Subfund	Project Coordinator:	Gail Bentley
Funding Sources: Solid Waste Revenues					

Project Description/Scope/Purpose

The Solid Waste Division in the Department of Public Works plans to perform a cost of service (COS) study on the solid waste collection and disposal system every five years. This project may be moved forward or delayed based on external circumstances such as legal issues or industry trends. This helps to ensure that costs are properly allocated among the various customer classes, and that costs are being fully recovered in rates. The COS was last done in 2001/2002.

The study, required by Solid Waste Sub-Element Policy 3.2F.1, Fiscal Sub-element 7.1A.1i, 7.1A.1k, and 7.1B.10c, will include evaluation of current services & disposal costs, time and motion data, contractor payment and city costs, and will distribute costs based on the tonnage generated by each customer sector.

An RFP is scheduled to be issued in late 2007 with the study to be conducted beginning in early 2008. The results of the study will be applied to 2008/2009 and subsequent solid waste rates.

The City began setting rates based on cost of service after Council approval of the cost of service policy in 1993. As costs change over time, rates tend to drift from cost of service. This can harm the cost-effectiveness of operations, as customers get economic signals that cause them to choose services in ways that increase costs more than revenues. Thus, rates must be periodically reviewed. The project cost estimate is based on historical costs.

Project Evaluation & Analysis

City policy requires that the rates be periodically restructured in a way that “equitably allocates program costs among rate payers” and to “reflect actual costs.” An alternative to using a consultant would be for staff to conduct the COS. However, city resources do not provide for the specialized experience and skills required to develop an accurate cost model, and staff hours are not available for a project of this magnitude.

If the project is not completed, it is possible that rates will not reflect actual costs, will not provide the complete cost-recovery needed to provide waste collection and disposal services, and costs may not be equitably allocated per city policy.

Fiscal Impact

The project is funded through rate revenues collected by the Solid Waste Enterprise Fund 485, and is budgeted to recur at five-year intervals. The cost in FY 2011/2012 and beyond is based on the cost of previous studies.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	0	0	0	0
2006-07	40,000	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	43,297	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	48,272	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	55,961	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	147,530	0	0	0
Grand Total	187,530	0	0	0

Project Information Sheet

Project: 824741 Landfill "Constituents of Concern" Monitoring

Category:	Special	Type:	Solid Waste	Department:	Public Works
Origination Year:	2003-04	Fund:	485 Solid Waste Management Fund	Project Manager:	Mark Bowers
Planned Completion Year :	Ongoing	Sub-Fund:	200 Solid Waste Capital Subfund	Project Coordinator:	Gail Bentley
Funding Sources: Solid Waste Revenues					

Project Description/Scope/Purpose

This project provides funding for the monitoring of the Landfill "Constituents of Concern". The Regional Water Quality Control Board (RWQCB) enforces regulations that require the City to routinely monitor the groundwater, surface water, and leachate in and around the closed Sunnyvale Landfill. The landfill is in Corrective Action status, for which the regulations normally require annual "Constituents of Concern" sampling and analysis for the full list of possible pollutants, regardless of whether they have previously been detected at the site. However, the RWQCB has discretion to approve less frequent monitoring and has approved the City's Corrective Action Plan, which calls for "Constituents of Concern" monitoring to occur once every five years. A total of 24 samples of groundwater, leachate and surface water are collected, with the samples sent to a contract laboratory for analysis. A report on the results is prepared by a engineering consultant and sent to the RWQCB.

This sampling and analysis requires significant additional expense at five-year intervals. "Constituents of Concern" sampling/analysis was last conducted during FY 2004/2005.

Project Evaluation & Analysis

There are no alternatives to the project. The "Constituents of Concern" sampling and analysis are required to be done at least once every five years. Eliminating or postponing the project would put the City out of compliance with its Corrective Action Plan and its Waste Discharge Requirements and expose it to RWQCB citations, fines, and litigation.

Fiscal Impact

The project is funded by Solid Waste Fund revenues. The cost for sampling and analysis is based on the cost of the FY 2004/2005 sampling/analysis event and current cost trends. This cost will recur every five years throughout the 20-year budget planning period. The project has no impact on operating costs. This project exists to isolate this infrequent, but costly, "Constituents of Concern" sampling and analysis cost from the operating budget.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	29,352	0	29,352	0
2006-07	0	0	0	0
2007-08	0	0	0	0
2008-09	0	0	0	0
2009-10	27,642	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	30,519	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	34,697	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	40,222	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	133,080	0	0	0
Grand Total	162,432	0	29,352	0

Project Information Sheet

Project: 825121 SMaRT Station Office Addition

Category:	Capital	Type:	Solid Waste	Department:	Public Works
Origination Year:	2003-04	Fund:	485 Solid Waste Management Fund	Project Manager:	Hira Raina
Planned Completion Year :	2009-10	Sub-Fund:	200 Solid Waste Capital Subfund	Project Coordinator:	Mark Bowers
Funding Sources: Solid Waste Revenues					

Project Description/Scope/Purpose

This project will add 648 square feet to the SMaRT Station administrative building. The addition would consist of one enclosed 10 x 12 ft. office and an enclosed 10 x 12 ft. work area/meeting room, with the remainder as open space for additional office cubicles.

The project is needed because the currently available space at the SMaRT Station is inadequate in both size and suitability to accommodate the number of staff located there and the volume and nature of work conducted. The inability of the staff to preserve the confidentiality of written and oral communication related to management of the SMaRT Station contract is of particular concern.

Recycling shares the current workspace with the SMaRT Station contractor. With the contractor's staff constantly moving in and out of the office and conducting their day-to-day business, this is very distracting. Noise levels are often so loud as to be overwhelming and distracting to staff. The proposed project will help distance our operation from the contractor's. Acoustical privacy for the manager (Recycling Supervisor) is necessary to have confidential discussions with staff and the SMaRT contractor without interruptions. The project will also address the shortage of space for files and storage of supplies and printed materials. The physical limits of the current work areas do not allow for any more space for storage and makes this space inconsistent with City work space standards.

The additional square footage for the SMaRT office building will be in use throughout the 20 year plan. Architectural and design work will begin in FY 2007/2008 and construction is scheduled for FY 2009/2010.

Project Evaluation & Analysis

Alternatives to increasing the space include making no changes and moving some staff members to an alternate site. If the project is not carried out, the current space will remain inadequate in both size and suitability for the amount and nature of work conducted. The nature of much of the work conducted by staff is closely related to the SMaRT Station operation. Moving all staff would reduce the effectiveness of staff and the work conducted. Moving part of the staff would split the Solid Waste Division among three sites, making it difficult to manage the division staff.

Fiscal Impact

This project is funded by the Solid Waste Fund (Fund 485). Cost of the project is \$367,000, based on engineering estimates. There is no ongoing operating cost impact once the project is complete--janitorial and utility cost would be absorbed by the SMaRT Station contractor.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	50,000	0	0	0
2008-09	0	0	0	0
2009-10	323,340	0	0	0
2010-11	0	0	0	0
2011-12	0	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	0	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	373,340	0	0	0
Grand Total	373,340	0	0	0

Project Information Sheet

Project: 825911 Landfill Gas Flare and Blowers Replacement

Category:	Infrastructure	Type:	Solid Waste	Department:	Public Works
Origination Year:	2005-06	Fund:	485 Solid Waste Management Fund	Project Manager:	Mark Bowers
Planned Completion Year :	2016-17	Sub-Fund:	300 Solid Waste Infrastructure Subfund	Project Coordinator:	Gail Bentley
Funding Sources: Solid Waste Fund Revenues					

Project Description/Scope/Purpose

State and Federal regulations require the City to collect and destroy landfill gas (LFG) produced by decomposition of garbage in the closed Sunnyvale Landfill. The gas is normally burned by engine-generators at the WPCP to make electricity. It is burned in the LFG flare when the generators are off-line. Two blowers alternately provide vacuum to the gas collection system and deliver gas to the flare. The flare, blowers and related equipment are housed in an enclosure known as the "flare station." the flare station and its contents were installed in 1987 and were expected to have a useful life of 30 years. In the prior budget, the entire flare station was scheduled for replacement in FY 2016/17. BAAQMD Rule 34 requires continuous operation of the collection system. Recent PG&E outages have prevented continuous operation and BAAQMD enforcement staff has told the City to install a backup generator for the blowers.

The current 25 hp blowers were installed in 1987 as part of the initial construction of the LFG collection system. They were sized at 25 hp to handle the initial flow, which was 1,200 standard cubic feet per minute (scfm). With the closure of the landfill in 1993, LFG quantities have declined to 400-500 scfm in FY 2006/07 and continue to decline. The blowers are showing advanced wear to their shafts and bearing races and are also larger than necessary for current gas flows and at around 317 scfm, a flow rate anticipated in 2011, the blowers will be unable to operate effectively. The check valves that prevent backflow of gas on the pressure side of the blowers will also be too large. In 2007/08, this project will rebuild one blower and add an emergency generator so that the blowers can continue to operate during PG&E outages. In 2011/12, the blowers, motors and check valves will be replaced with new, smaller equipment that can be used for another 20 years. In 2016/17, the flare itself, plus its controls and instrumentation will be replaced.

Project Evaluation & Analysis

SCS Engineers estimates the lower limit of blower operation to be 317 scfm. Staff Projections show that this limit will be reached in around 2011. Replacing the blowers in 2011 with 10 or 15 hp blowers will allow their use through 2031.

Fiscal Impact

The project is funded by the Solid Waste Fund (rate revenues). Cost estimates are based on vendor quotes and consultant and staff estimates. If replaced, blowers will have a 20 year life. New flare in 2016/2017 will have a life of 20 years or longer, if periodically refurbished. Flare replacement costs have been updated based on current vendor quotes.

Project Financial Summary

	Project Costs	Revenues	Transfers In	Operating Costs
Prior Actual	0	0	0	0
2006-07	0	0	0	0
2007-08	96,000	0	0	0
2008-09	0	0	0	0
2009-10	0	0	0	0
2010-11	0	0	0	0
2011-12	106,120	0	0	0
2012-13	0	0	0	0
2013-14	0	0	0	0
2014-15	0	0	0	0
2015-16	0	0	0	0
2016-17	351,496	0	0	0
2017-18	0	0	0	0
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0
2021-22	0	0	0	0
2022-23	0	0	0	0
2023-24	0	0	0	0
2024-25	0	0	0	0
2025-26	0	0	0	0
2026-27	0	0	0	0
20 Year Total	553,616	0	0	0
Grand Total	553,616	0	0	0